

Application No. : 10/639,070
Filed : August 12, 2003

IN THE CLAIMS

Please amend Claims 1, 9, 28, 36, 44-45, 47, 55, 60, 68, and 69, cancel Claims 14, 30, 43,
5 65, and 70 without prejudice, and add new Claims 74-75 as follows:

1. (Currently amended) A method for delivery of programming content to a
plurality of user terminals over a communications network, comprising:
detecting an indicator indicative of an event in the delivery of the programming content;
10 in response to a detection of the indicator, generating a list of individual ones of
the plurality of user terminals currently receiving the programming content;
obtaining data descriptive of at least one group of members of the list;
generating substantially in real time at least one programming segment based at
least on the data; and

15 providing, to the at least one group, the at least one programming segment in lieu
of at least a portion of the programming content during the event.

2. (Original) The method of claim 1, wherein the indicator contains a message which
includes a start time of the event.

3. (Original) The method of claim 1, further comprising:
20 identifying available transmission channels in the network; and
transmitting the at least one programming segment over at least one of the available
transmission channels.

4. (Original) The method of claim 1, wherein the event includes an advertisement
break.

25 5. (Original) The method of claim 1, wherein the indicator includes a digital program
insertion (DPI) cue.

6. (Original) The method of claim 1, wherein the at least one programming segment
comprises one or more advertisements.

7. (Original) The method of claim 1, wherein the network includes a two-way multi-
30 channel delivery network.

8. (Original) The method of claim 1, wherein the network includes a cable TV network.

9. (Currently amended) A method for delivering a program stream containing programming material over a communications network to a plurality of user terminals, comprising:

detecting, in the program stream, a message indicating a scheduled programming segment;

in response to a detection of the message, identifying a set of user terminals currently receiving the program stream;

identifying one or more groups of user terminals within the set of user terminals currently receiving the program stream;

generating, subsequent to and based at least in part on identifying one or more groups of user terminals within the set of user terminals currently receiving the program stream, one or more data streams containing one or more alternate programming segments for substituting the scheduled programming segment; and

~~providing at least one of the data streams to a selected one of the identified groups over the communications network.~~

directing at least one user terminal in a selected one of the one or more groups to tune from a first transmission channel to a second transmission channel at the start of the scheduled programming segment;

transmitting at least one of the data streams over the second transmission channel; and

directing the at least one user terminal in the selected one of the groups to re-tune to the first transmission channel at the end of the scheduled programming segment.

10. (Original) The method of claim 9, wherein the scheduled programming segment comprises one or more advertisements.

11. (Original) The method of claim 9, wherein the message includes a start time of the scheduled programming segment.

12. (Original) The method of claim 9, wherein the message includes a DPI cue.

13. (Original) The method of claim 9, wherein at least one of the alternate programming segments comprises advertisements.

14. (Canceled)

15. (Original) The method of claim 9, wherein the one or more groups are identified by analyzing demographic data associated with the user terminals in the set.

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16. (Original) The method of claim 9, wherein the one or more groups are identified as a function of at least the number of available transmission channels in the network.

17. (Original) The method of claim 16, wherein the one or more groups are identified also as a function of the number of additional scheduled programming segments expected to occur concurrently with the scheduled programming segment.

18. (Original) The method of claim 16, wherein the one or more groups are identified also as a function of the number of additional program streams expected to be delivered concurrently with the program stream during the scheduled programming segment.

19. (Original) The method of claim 18, wherein the additional program streams utilize a subset of the available transmission channels.

20. (Original) The method of claim 16, further comprising determining a subset of the available transmission channels for carrying the one or more data streams.

21. (Original) The method of claim 9, wherein the network includes a two-way multi-channel delivery network.

22. (Original) The method of claim 9, wherein the network includes a cable TV network.

23. - 27. (Cancelled)

28. (Currently amended) A system for delivering programming content over a communications network, comprising:

a detector for detecting an indicator indicative of an event in the delivery of the programming content;

a processing unit, responsive to a detection of the indicator, for generating a list of an audience currently receiving the programming content, data being obtained which is descriptive of at least one group of members of the audience;

a server for generating at least one programming segment based at least on the data; and

a mechanism for providing, to the at least one group, the at least one programming segment in lieu of at least a portion of the programming content during the event;

wherein the system is configured to identify available transmission channels in the network, the at least one programming segment being transmitted over at least one of the available transmission channels.

29. (Original) The system of claim 28, wherein the indicator contains a message which includes a start time of the event.

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30. (Canceled)

31. (Original) The system of claim 28, wherein the event includes an advertisement break.

32. (Original) The system of claim 28, wherein the indicator includes a DPI cue.

33. (Original) The system of claim 28, wherein the at least one programming segment comprises one or more advertisements.

34. (Original) The system of claim 28, wherein the network includes a two-way multi-channel delivery network.

35. (Original) The system of claim 28, wherein the network includes a cable TV network.

36. (Currently amended) A system for delivering a program stream containing programming material over a communications network to a plurality of user terminals, comprising:

a module for dynamically assigning transmission channels;

a detector for detecting, in the program stream, a message indicating a scheduled programming segment;

a processing unit responsive to a detection of the message, for identifying a set of one or more user terminals which is currently receiving the program stream, and grouping said identified set of one or more terminals into one or more groups based on at least one characteristic[;], the at least one characteristic comprising a function of at least the number of available transmission channels in the network;

a server for generating one or more data streams containing one or more alternate programming segments for substituting the scheduled programming segment within the program stream[;] said alternate programming segment not being present in the programming schedule prior to said detecting; and

a mechanism for providing at least one of the data streams over a dynamically assigned transmission channel to a selected one of the groups.

37. (Original) The system of claim 36, wherein the scheduled programming segment comprises one or more advertisements.

38. (Original) The system of claim 36, wherein the message includes a start time of the scheduled programming segment.

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39. (Original) The system of claim 36, wherein the message includes a DPI cue.

40. (Original) The system of claim 36, wherein at least one of the alternate programming segments comprises advertisements.

41. (Original) The system of claim 36, wherein at least one user terminal in the selected group is directed to tune from a first transmission channel to a second transmission channel at the start of the scheduled programming segment, and to re-tune to the first transmission channel at the end of the scheduled programming segment, the at least one data stream being transmitted over the second transmission channel.

42. (Previously presented) The system of claim 36, wherein the at least one characteristic comprises demographic data associated with the user terminals in the set.

43. (Canceled)

44. (Currently amended) The system of claim ~~[[43]]~~ 36, wherein the at least one characteristic also comprises a function of the number of additional scheduled programming segments expected to occur concurrently with the scheduled programming segment.

45. (Currently amended) The system of claim ~~[[43]]~~ 36, wherein the at least one characteristic also comprises a function of the number of additional program streams expected to be delivered concurrently with the program stream during the scheduled programming segment.

46. (Original) The system of claim 45, wherein the additional program streams utilize a subset of the available transmission channels.

47. (Currently amended) The system of claim ~~[[43]]~~ 36, wherein a subset of the available transmission channels for carrying the one or more data streams is determined.

48. (Original) The system of claim 36, wherein the network includes a two-way multi-channel delivery network.

49. (Original) The system of claim 36, wherein the network includes a cable TV network.

50. - 54. (Cancelled)

55. (Currently amended) A method for providing targeted advertisements over a communications network, the communications network comprising a plurality of transmission channels, a selected one of the transmission channels delivering at least a program stream containing programming content to one or more of a plurality of users according to a schedule, the method comprising:

detecting an indicator indicative of an advertising segment within the programming content;

if the indicator is detected, performing the following (a) through (d):

(a) deriving a list of a set of the plurality of users which are receiving the programming content during the scheduled presentation of the programming content;

(b) identifying one or more groups within the set of the plurality of users;

(c) allocating one or more available transmission channels for conveying at least one advertisement data stream, the number of available transmission channels allocated being a function of the number of the groups and the number of program channels being requested by the set of the plurality of users during the scheduled presentation of the programming content; and

(d) providing, over the allocated one or more transmission channels, the at least one advertisement data stream which contains one or more advertisements targeted at a selected group of the set of the plurality of users, in lieu of providing the advertising segment within the programming content;

wherein said one or more advertisements are not present within the programming schedule prior to said detecting.

56. (Previously presented) The method of claim 55, wherein the indicator contains a message which includes a start time of the advertising segment.

57. (Previously presented) The method of claim 55, wherein the indicator includes a DPI cue.

58. (Previously presented) The method of claim 55, wherein the network includes a two-way multi-channel delivery network.

59. (Previously presented) The method of claim 55, wherein the network includes a cable TV network.

60. (Currently amended) A system for providing targeted advertisements over a communications network, the communications network comprising a plurality of transmission channels, a selected one of the transmission channels delivering at least a program stream containing programming content to one or more of a plurality of users according to a schedule, the system comprising:

a detector for detecting an indicator indicative of an advertising segment within the programming content;

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a processing unit responsive to a detection of the indicator, for generating a list of an audience receiving the programming content during the scheduled presentation of the programming content, one or more groups of the audience being identified;

a server for allocating one or more available transmission channels for conveying at least one advertisement data stream, the number of available transmission channels allocated being a function of the number of the groups and the number of program channels currently being requested by the audience during the scheduled presentation of the programming content; and

a mechanism for providing, over the allocated one or more transmission channels, the at least one advertisement data stream which contains one or more advertisements targeted at a selected group of the plurality of users, in lieu of providing the advertising segment within the programming content;

wherein said one or more advertisements are not present within the programming schedule prior to said detecting.

61. (Previously presented) The system of claim 60, wherein the indicator contains a message which includes a start time of the advertising segment.

62. (Previously presented) The system of claim 60, wherein the indicator includes a DPI cue.

63. (Previously presented) The system of claim 60, wherein the network includes a two-way multi-channel delivery network.

64. (Previously presented) The system of claim 60, wherein the network includes a cable TV network.

65. (Canceled)

66. (Previously presented) The method of Claim 1, wherein said programming content comprises advertising and non-advertising content.

67. (Previously presented) The method of Claim 55, wherein said at least one similar characteristic comprises a similar demographic.

68. (Currently amended) A system for providing targeted advertisements to a plurality of users over a two-way delivery network comprising a plurality of transmission channels, said system comprising:

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an element adapted to detect a segment within scheduled programming content comprising first advertisements delivered over an individual one of said plurality of transmission channels;

a processing unit adapted to

5 responsive to said detection,

ascertain an identity of individual ones of said plurality of users receiving said scheduled programming content; ~~and~~

categorize said individual ones of said plurality of users receiving said scheduled programming content into one or more groups; and

10 selectively replace said segment within said scheduled programming content comprising first advertisements, with one or more second advertisements;
and

a server adapted to, responsive to said detection, dynamically select one or more of said plurality of available transmission channels to convey said one or more second advertisements,
15 said second advertisements targeted at one of said one or more groups of said plurality of users. ~~[[; and]]~~

~~a mechanism for selectively replacing said segment within said scheduled programming content comprising first advertisements with said one or more second advertisements.~~

69. (Currently amended) A method for delivery of programming content to a
20 plurality of user terminals over a communications network, comprising:

detecting a cueing indicator indicative of at least one timing reference associated with an advertising event in the delivery of the programming content;

in response to a detection of the indicator, performing the acts of: ~~generating a list of individual ones of the plurality of user terminals currently receiving the programming content;~~

25 identifying available transmission channels in the network;

generating a list of individual ones of the plurality of user terminals currently receiving the programming content;

obtaining data descriptive of at least one group of members of the list;

~~providing~~ identifying at least one advertisement based at least on the data; ~~[[and]]~~

30 ~~providing, to the at least one group, the at least one advertisement in lieu of at least a portion of the advertising event in the programming content.~~

transmitting to the at least one group the programming content over a first of the available transmission channels;

directing at least one user terminal in the at least one group to tune from the first transmission channel to a second transmission channel at the start of the advertising event;

transmitting the at least one advertisement over the second transmission channel;

and

directing the at least one user terminal in the at least one group to re-tune to the first transmission channel at the end of the advertising event.

70. (Canceled)

71. (Previously presented) The method of Claim 69, wherein the cueing indicator includes a digital program insertion (DPI) cue.

72. (Previously presented) The method of Claim 69, wherein the communications network includes a two-way multi-channel delivery network.

73. (Previously presented) The method of Claim 69, wherein the communications network comprises a cable TV network.

74. (New) A method for delivering a transmitted program stream over a network to a plurality of user terminals, comprising:

detecting, in the transmitted program stream, information relating to a scheduled programming segment;

specifying a subset of user terminals within a set of user terminals currently receiving the program stream;

generating, based at least in part on said subset, a data stream containing at least one alternate programming segment for substitution of the scheduled programming segment;

directing, at the start of the scheduled programming segment, at least one user terminal in said subset to tune from a first transmission channel over which said program stream is being transmitted, to a second transmission channel;

transmitting the data stream over the second transmission channel; and

directing the at least one user terminal in the subset to re-tune to the first transmission channel at the end of the scheduled programming segment.

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75. (New) A method for delivering user-specific content over a network to at least one of a plurality of user terminals, comprising:

detecting in a program stream information relating to a programming segment, said programming segment being part of a pre-existing programming schedule;

5 identifying a subset of user terminals within a set of user terminals currently receiving the program stream;

generating, based at least in part on information associated with said subset, a data stream containing at least one alternate programming segment for substitution of the scheduled programming segment, the at least one alternate stream not being part of said pre-existing
10 programming schedule;

directing, at the start of the programming segment, at least one user terminal in said subset to tune from a first transmission channel over which said program stream is being transmitted, to a second transmission channel;

transmitting the data stream over at least the second transmission channel; and

15 directing the at least one user terminal in the subset to re-tune to the first transmission channel at the end of the programming segment.